River East L.L.C.
Site Excavation
Soil Management Plan
Work Order

MCL River East Development

R E P O R T

MCL Companies
455 East Illinois Street
Suite 565
Chicago, Illinois 60611

River East L.L.C.
Site Excavation
Soil Management Plan
Work Order

MCL River East Development

STS Project No. 24418-RR

September 15, 1998

MCL COMPANIES
River East Development
Lindsay Light II Site
Chicago, Illinois

SITE EXCAVATION SOIL MANAGEMENT PLAN WORK ORDER

Property Owner: River East L.L.C.
Property Location: Parcel Bounded by Illinois Street (south), McClurg Court (east), Columbus Drive (west), and Grand Avenue (north).
Parcel ID Number:_____

TABLE OF CONTENTS

I. INTRODUCTION

This work order describes the site development and excavation work which is proposed at the Lindsay Light II site as part of the River East development. In particular, the work described herein is that which will be required in the removal and management of the thorium-contaminated soil as part of the site development work.

Site remediation work previously completed at the site included the removal of 24,025 tons of contaminated soil and disposal at Envirocare of Utah. An area of residual contamination remained following that removal as a result of groundwater limiting the depth to which excavation could proceed. Assuming approval of this Work Order and the anticipated progress of the site development schedule, the remaining contamination is anticipated to be removed in 150 days (5 months) from start of construction, which is currently scheduled for mid-October, 1998.

Except as proposed herein, and as referenced in this Work Order, the work is to be done in general accordance with the Scoping and Planning (S&P) Documents for the Lindsay Light II site, with the following responsibilities which are different from the S&P:

Owner:	River East LLC
Construction Manager:	Morse Diesel
Environmental Consultant:	STS Consultants

Kerr-McGee, LLC will provide for transport and disposal of the thorium-contaminated soil, as in the S&P.

Section II of this work order describes the project development proposed for the site. The proposed development is illustrated in Figure 1. This section also describes the anticipated construction sequence and describes where removal and management of thorium-contaminated soil will be required.

Section III of this work order describes the thorium-contaminated soil locations known to be present on or adjacent to the site. These locations are shown on Figure 2.

Section IV of this work order describes the excavation sequence and the soil management practices for handling the uncontaminated and contaminated soils. This section describes the excavation equipment which will be used and provides for the staging of the soil and transport boxes as excavation proceeds.

Section V describes the sampling methods which are proposed for the various excavation methods which will be utilized in the site construction.

II. PROJECT DESCRIPTION

The proposed River East development will occupy the entire property parcel. Two high-rise towers are planned, at the east and west ends of the site. The interval between the two towers will be developed as commercial space at a height of 5 stories. The development will include 4 basement levels. It is this basement space which requires the removal of the remaining thorium impacted soil, as the basement will extend to a depth of approximately 55 ft. below current site grade.

The proposed method of development is referred to as "top down", which is in reference to the practice of extending the superstructure up at the same time the basement and substructure are being excavated and constructed. In that both are in progress at the same time, rather than waiting for the basement to be completed before starting the above-grade structure, the building can be completed in a shortened schedule.

The top down construction method will include the following construction/excavation activities which have the potential to encounter thorium-contaminated soil:

Slurry wall excavation
Caisson excavation
Tower core excavation
Site-wide excavation.

The slurry wall surrounding the site will be a structural wall providing support for the excavation as the basement is excavated, and a low permeability wall providing cutoff for the groundwater. The wall will be excavated in panels between perimeter caissons. The wall is initially constructed as a guide wall. The guide wall consists of two parallel concrete panels at the ground surface, extending 3 to 5 ft. deep which constrain the excavating equipment to the proper alignment during excavation of the slurry wall. Excavation will be conducted using a clam excavator on a crane and cable. The excavation proceeds under a

slurry as the wall is excavated a design minimum width of 30 inches to a design depth of 62 ft. below current grade. Along the southern margin of the residual thorium area known as "Lake Lindsay" in the vicinity of station 65E, there is potential for the slurry wall excavation to encounter thorium- contaminated soil at an anticipated depth of 14 to 15 ft. The location of the slurry wall is shown on Figure 3.

The caissons are large diameter belled shafts which will extend to minimum depths of 96 ft. The caisson spacing varies depending on the location beneath the structure. Around the perimeter wall, spacing is on the order of 30 ft., with the slurry wall spanning the interval between caissons. Under the building towers, spacing is as close as approximately 25 ft. Spacing between rows of caissons is as wide as 55 ft. A plan showing the caisson distribution is included as Figure 3.

The caisson shafts are excavated using large diameter augers. Caisson shaft diameters are designed to range from 3.5 to 9.5 ft.

Design drawings showing caisson locations, Figure 3, show 22 caissons within the Lake Lindsay area. Approximately half of these are in areas previously documented as clean, based on borings. Where the caissons are advanced through the previously excavated volumes, there is no risk of encountering thorium contamination. Additionally, below a depth of 22 ft., no thorium contamination was detected in the borings. The clay which lies below the deepest identified thorium impacted soil is not expected to exhibit any elevated thorium measurements.

As construction commences, the first open excavation of any significant size beyond the caisson excavations is for the core of the east tower. It is to be excavated within a coffer dam assembly and will extend to a depth of 56 ft. That core excavation may require a specific dewatering effort preceding the dewatering for the remainder of the excavation. A discussion of dewatering is included in the excavation sequence, Section IV of this work order. No identified contamination remains in the area to be excavated for the tower core.

Several excavated areas where contamination was removed lie within or adjacent to the footprint of the tower.

General site-wide excavation will proceed in two separate phases. The first phase is the lowering of the site approximately 5 ft. This will precede the slurry wall guide wall construction, slurry wall excavation, and caisson drilling. The second site-wide excavation phase will follow the installation of the caissons and slurry wall. This excavation will lower the site to an approximate elevation 15 ft. below the current site grade, or an additional 10 ft. At that point, in the absence of the thorium contamination, the first basement floor would be constructed. In that some thorium-contaminated soil is evident below this depth, that contaminated soil will be removed and the resulting excavations backfilled before the first basement floor is constructed.

III. THORIUM-IMPACTED SOIL MANAGEMENT

The thorium contamination removal completed in 1996 and 1997 at this site identified soil which remained after the removal and which apparently exceeded the threshold for designation as thorium contaminated, 7.1 pCi/g. That soil was not removed due to groundwater which interfered with the excavation. That area is referred to as "Lake Lindsay" and lies within the following clean limits: 30E to 75E, -5N to 35N. (This station grid is in meters from a point at the southwest corner of the site.) The depths of the remaining thorium impacted soils identified in the borings in that area are shown on Figure 2. This is the principal area of concern with regard to management of thorium-contaminated soil and will be encountered during the drilling of the caissons, the general site excavation, and potentially during the excavation of the slurry wall.

Thorium contamination was also documented as remaining in place beneath Illinois Street, and beneath the sidewalk along the west side of the site, on the east side of Columbus Drive. These locations are also shown on Figure 2. In that these areas are outside the proposed construction limits for the River East development, they are proposed to remain in place. A Highway Authority Agreement is in process of being developed between the City of Chicago and the Responsible Parties, Kerr-McGee LLC and River East LLC, to allow this material to remain in place.

It is possible that as the general site grading proceeds on this site, previously unidentified locations with thorium contamination may be documented. If and when those areas are noted, they will be included in the thorium contamination management program to the same extent as the previously known contamination in the Lake Lindsay area.

The following section, Section IV, describes the excavation process, equipment and staging of the soil as it is removed. Additionally, Section IV describes the management of the water which is to be removed from the excavation, which includes the groundwater which is present within the excavation volume inside the slurry wall, the groundwater which might

infiltrate into the excavation, and the precipitation which falls into or run-on which enters the excavation. Section V describes the field screening, sampling and documentation which will be used to characterize the material removed and the remaining conditions after the removal is completed.

IV. EXCAVATION SEQUENCE, EQUIPMENT

Site Preparation

The site will be fenced at the beginning of construction. All utilities will be disconnected. All surface structures including light poles, parking attendant booths, parking ticket dispensers, temporary buildings, and signs will be removed from the site.

Initial Site Excavation

The first excavation on site will be to lower the overall site elevation approximately 5 ft. Initially, the asphalt pavement and base course will be removed. Removal will utilize rubber-tired or tracked front-end loaders, loading directly into semi-trailer dump trucks. As this stripping operation proceeds, the area where the pavement has been removed will be screened for elevated gamma radiation and anomalous gamma areas will be explored for subsequent removal, as detailed in Section V.

Soil excavation procedures will be guided by the results of the surface gamma survey performed after the asphalt pavement and base course have been removed. In areas where no thorium contamination was detected, material may be removed without restriction in 3 ft. lifts. Excavation will proceed with front-end loaders with rubber tires or track driven units, and soil will be loaded into dump trucks and removed from site. This material will be field screened to document that it meets the criteria for management as uncontaminated soil. Screening methods and frequency are described in Section V. Similarly, when the removal of all identified contamination in the Lake Lindsay area is completed as a result of the later excavation, and the USEPA has released the site as free of thorium contamination, restrictions on the thickness of the excavation passes will not apply. Gamma screening will be conducted at approximately 3 ft. depth intervals through the excavation so as to document the absence of contamination.

Where surface gamma measurements indicate thorium contamination is present, the material will either be excavated immediately if the area is relatively small, i.e., less than 2 meters square, or, if larger than 2 meters square, the area will be explored with Geoprobe borings to determine the vertical and horizontal extent of contamination. Borings will be completed on 3 m centers or narrower as appropriate to define the lateral limits of contamination and minimize contaminated soil removal. Borings will be down-hole screened in 6 inch increments to identify the vertical limits of contamination, and borings will be completed to 12 inches beyond this point. Contaminated soil will be excavated using either hand tools if the area is sufficiently small or a backhoe with a maximum 1 cubic yard bucket. The limitation on bucket size is to allow loading into the transport boxes. Hand excavated material will be loaded into "Super sacks," reinforced 1 cubic yard membrane and textile containers which will be subsequently loaded into transport boxes.

Empty boxes will be staged off-site. Boxes will be brought to site as required and positioned adjacent to but outside the exclusion zone established in accordance with the S&P documents. Contaminated soil will only be removed from the site in transport boxes which have been surveyed clean as specified in the S&P documents.

An air sampling program will be implemented when excavation activities are required in areas where gamma radiation exceeds the remediation threshold of 7.1 pCi/g. Air sampling will be conducted near the margins of the excavations on all four sides of the excavations. This will provide coverage in the event of changing wind directions, which are common in the heavily developed downtown Chicago environment. Personnel monitoring will also be conducted in accordance with the Lindsay Light Health & Safety Plan. The program will conducted according to standards outlined in the S & P documents, Appendix B, document 102.

Caisson Installation

The perimeter caissons will be installed following the site stripping operation. Spoil from the augers will be screened and the spoil placed directly into dump trucks for removal (clean soil) or in a contaminated stockpile for loading and transport to Envirocare of Utah (contaminated soil). Contaminated soil may also be placed directly into Super sacks. Procedures for screening are described in Section V. The caissons will be drilled with a standard caisson rig contracted through Morse Diesel. Caisson shaft diameters on the perimeter caissons will range from 3.5 to 6.5 ft. Caisson depths will be 96 ft.

Two crews will operate, and travel opposite directions around the perimeter line of caissons. One of the two caisson crews is proposed to be trained for radiation safety, and only this crew will operate in the Lake Lindsay area. Cuttings within Lake Lindsay will be screened from 0 to 22+ ft. below grade. In contrast, cuttings outside Lake Lindsay will be screened through the old fill (0-10 ft.) only. Where cuttings from the caisson drilling exhibits radiation levels above the contamination threshold of 7.1 pCi/g, the safety-trained crew will also be required to complete the remainder of the excavation and construction of that caisson. Minor amounts of contamination will be hand-loaded by radiation-trained laborers into Super sacks.

Following completion of the perimeter line of caissons, the caisson crews and equipment will move to the interior caissons. As with the perimeter caissons, if screening of the auger cuttings document contamination, the radiation trained crew will complete the caisson. Only the radiation trained crew will drill in the Lake Lindsay area. Similarly, if anomalous gamma areas are detected in the site screening following the site stripping, and caissons are to be drilled within 5 ft. of a gamma anomaly before the contamination is removed and the location screened as being clean, only the trained crew will drill at those locations.

Slurry Wall Installation

The slurry wall will be installed in panels excavated between two perimeter caissons. Initially, a guide wall is constructed to maintain the alignment of the slurry wall and to confine the slurry as the excavation proceeds. The guide wall is a parallel set of concrete walls approximately 4 to 5 ft. in total height, extending 1 ft. above grade and 3 to 4 ft. below grade. The walls are formed and poured prior to beginning the slurry wall panel excavation. They serve to keep the excavating equipment in line with the caissons and constrain the width of the slurry wall excavation.

Two crews will proceed to install the slurry wall panels. As with the caisson crews, only one crew will be radiation safety trained. Only the radiation-trained crew will operate in the Lake Lindsay area. In the event screening of the slurry spoil outside Lake Lindsay exhibits thorium contamination, the remainder of the panel will be completed by the radiation trained crew.

Excavation will proceed with a clam excavator. Screening of the material will occur at three points. First, screening will be conducted as soil from the fill materials is excavated from 0 to 10 ft. depth in the trench. Material exhibiting elevated gamma radiation above the threshold levels will be placed in a staging area to drain before placing in a transport box. The staging area will require screening and clearance following removal of the contaminated trench spoil. Second, as the slurry is removed during placement of the concrete into the trench, the sediment is removed in a desanding operation. The sediment from this desanding operation will require screening for elevated thorium. That sediment is periodically removed by excavating with a backhoe. Screening will be done as the sediment is excavated. Finally, the apparently clean soil will also be periodically sampled and analyzed to document the absence of thorium above the cleanup criteria. The sampling method and frequency are described in Section V.

Site-wide Excavation

Once the caissons are completed at one end of the site, the general site excavation will proceed across the site to a depth approximately 15 ft. below current site grade. The excavation will proceed according to the guidelines described for the initial site excavation. This includes unrestricted removal of soils in maximum 3 ft. lifts from areas deemed uncontaminated by surface gamma surveys. The lateral extent of areas with elevated gamma readings (>7.1 pCi/g) will determine subsequent soil excavation procedures.

When the contaminated soils comprise an area larger than 2 m^2, they will be investigated with Geoprobe soil borings to better define the lateral and vertical extent of the radiation contamination. Borings will be logged and scanned in 6 inch increments and will be completed 12 inches below the contaminated zone. If the contaminated area is less than 2 m^2, the soils will be excavated in 12 inch layers and the new surface scanned for gamma radiation. This process will continue until clean soil is reached. All contaminated soil will be removed with a backhoe and placed into transport boxes. Contaminated soil will only be removed from the site in transport boxes which have been surveyed clean as specified in the S&P documents.

A surface gamma survey will be performed every 3 ft. of depth while excavating in the fill soils to address the masking effects of soil on the surface survey, which has an effective investigation depth of approximately 3 ft. The procedures outlined above will be applied after each surface gamma survey, and soils will be disposed of accordingly.

In the Lake Lindsay area, it is known from previous drilling that some thorium impacted soil is present below the 15 ft. level. Once the area has been excavated to the overall 15 ft. depth, that contaminated soil which remains below the 15 ft. depth will be excavated in isolated test pits, removing the soil to a clean bottom, sampling to document the removal and clean closure as described in Section V, and then backfilling the pits to the uniform grade of -15 ft.

Tower Core Excavation

The tower core for the east tower will be excavated within a coffer dam structure, while the caisson installation is proceeding on the remainder of the site. The excavation will proceed to a depth of 56 ft., and then proceed with construction of the sheer wall structure. This excavation will be conducted with backhoes and hydraulic excavators. Soils will be screened according to the procedures outlined above for the site-wide excavation. The excavated material will be screened for gamma radiation, and, based on these measurements, will be distributed into a contaminated soil transport box or dump truck for off-site management. Areas exhibiting elevated gamma radiation will be excavated with a backhoe and the resulting excavation screened and certified by IEPA, after which normal excavation will proceed.

Water Management

Water to be removed from the site as part of the construction includes the groundwater contained in the soil below the water table, groundwater which may enter the site through the slurry wall, and groundwater which may infiltrate up through the clay soil. Additionally, any precipitation or run-on which enters the site will either have to be removed with the soil or be pumped from the site.

It is proposed to discharge the water to the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC) combined sewer system. Morse Diesel, the construction manager for the River East development, is proceeding to secure authorization from MWRDGC for this discharge. The water will be treated, if necessary, to meet the pre-treatment standards set by the MWRDGC. Monitoring of the effluent from the treatment system will be conducted as specified by MWRDGC. It is likely this treatment will be limited to filtration to remove suspended solids. The filter media or plates will be screened

for elevated radiation before disposal, and any filter material exhibiting readings above the contamination threshold will be disposed with the contaminated soil at Envirocare of Utah.

Water will either be removed from a series of dewatering wells and the water level lowered through pumping prior to the excavation reaching the depth of the water table, or a series of sumps will be excavated as the soil removal proceeds. Some of the water may be recycled on site for dust control.

V. VERIFICATION SAMPLING PROGRAM

In order to demonstrate that the base and sides of contaminated soil excavations meet cleanup criteria described in the Unilateral Administrative Order (UAO), a verification/field sampling program must be implemented during the excavation of contaminated materials. These procedures are specifically designed for the Lake Lindsay area, but will also be applied to other excavation activities on site. Dust will be controlled and monitored throughout excavation activities in exclusion zones according to procedures described in the QAPP and Air Monitoring Plan. The verification sampling program will test for total radium (Ra-226 and Ra-228) only, and is representative of the entire U-238 and Th-232 decay series encountered on site.

Sample screening and clean up verification will be conducted through on site survey with direct measurements of gamma radiation (2-inch by 2-inch NaI(Tl) gamma detector; Ludlum Model 2221 portable scaler ratemeter analyzer) in accordance with SOP-210, and through analysis at an off-site laboratory, Quanterra, Earth City, Missouri. (The Quality Assurance Project Plan for Quanterra was previously submitted and approved by Region 5 USEPA. An expedited review for their use on this project is proposed.)

Initial Site Excavation

Excavation activities will begin with the site-wide removal of 5 ft. of soil. The uncontaminated asphalt and soils overlying the site will be removed. The surface will be surveyed for gamma radiation, and any areas where measurements are greater than 7.1 pCi/g will be removed as contaminated. All other soils, asphalt, or debris will be shipped off-site as clean. These other materials may be sampled intermittently for confirmation. Contaminated soils will be disposed off-site according to procedures in the S & P documents. Clean soils will be loaded directly into dump trucks for transport off-site.

In order to screen the material being excavated, a surface gamma survey will be performed in reference to previously established grid patterns. The survey will be conducted according to procedures outlined in the Gamma Survey SOP-210. In the event anomalous gamma readings are measured, a Geoprobe drill rig may be used to log thorium-contaminated areas. Such soil probes will be logged in 6 inch increments in accordance with SOP-LLII 655 and LLII 657. Exploration will extend a minimum of 12 inches into clean soil.

Excavation in an area of indicated thorium contamination will proceed through the overburden/innerburden in 12 inch intervals until within 12 inches of the indicated contamination. Each loader bucket will be screened with a gamma meter.

The indicated area of elevated gamma radiation will be delineated as an exclusion zone with colored rope in accordance with the S & P documents. Upon removal of the contaminated interval (as indicated by the depth interval logged as contaminated and as indicated by surface screening of the excavation base), samples will be recovered in accordance with SOP-214-1. These samples will be sent to Quanterra for verification.

Caisson Installation

Caissons will first be installed along the perimeter then on the interior of the site, proceeding from one end to the other. The spoil from the caisson augers drilled in known or suspected contaminated areas will be field screened as the soils are brought to the surface, and soils will be distributed based on these measurements. Soils will be screened while on the augers. Auger spoil comprised of other fill soils will be screened intermittently.

If the field screening indicates thorium levels above the cleanup criteria, the radiation-trained laborers will place that soil into Super-sack containers, the HP will release the auger and the auger crew will resume drilling. The depth interval exhibiting contamination will be recorded for each caisson encountering elevated thorium concentrations. Auger spoils will be field screened intermittently throughout the caisson interval, with more frequent screening in the fill soils.

Caisson augers will be decontaminated after any contaminated holes and at the end of each contaminated zone within a caisson hole. Decontamination procedures are outlined in SOP LLII347, and essentially involve removing any contaminated soil from the augers.

Slurry Wall Excavation

The slurry wall will be installed around the perimeter of the site, and is constructed in panels between adjacent perimeter caissons. The field sampling procedures described here will generally be applied to the excavation for the guide wall which will be emplaced to confine the slurry and maintain alignment of the wall.

Excavation will be completed using a clam excavator. The only expected contamination is located within two panels at the south end of Lake Lindsay. Any contaminated material at depths shown on Figure 2 will be handled appropriately. All other slurry wall excavations

will be handled as clean with intermittent gamma screening for verification. Materials producing gamma radiation above the cleanup criteria will be placed in a staging area or roll-off box to drain. The empty clam will then be screened to determine if any residual contaminated soils remain. If contaminated soils remain on the clam, it will be decontaminated in a water bath to remove all sediments.

As the trench is filled with concrete, the sediment is removed from the slurry in a desanding operation. The sediment from the two panels south of Lake Lindsay will be screened for radiation levels, and distributed accordingly as clean or contaminated material. When all contaminated materials are dry, they will be transported off site, and the staging area will be screened. Representative samples will submitted to a remote lab for confirmation.

Final Site Excavation

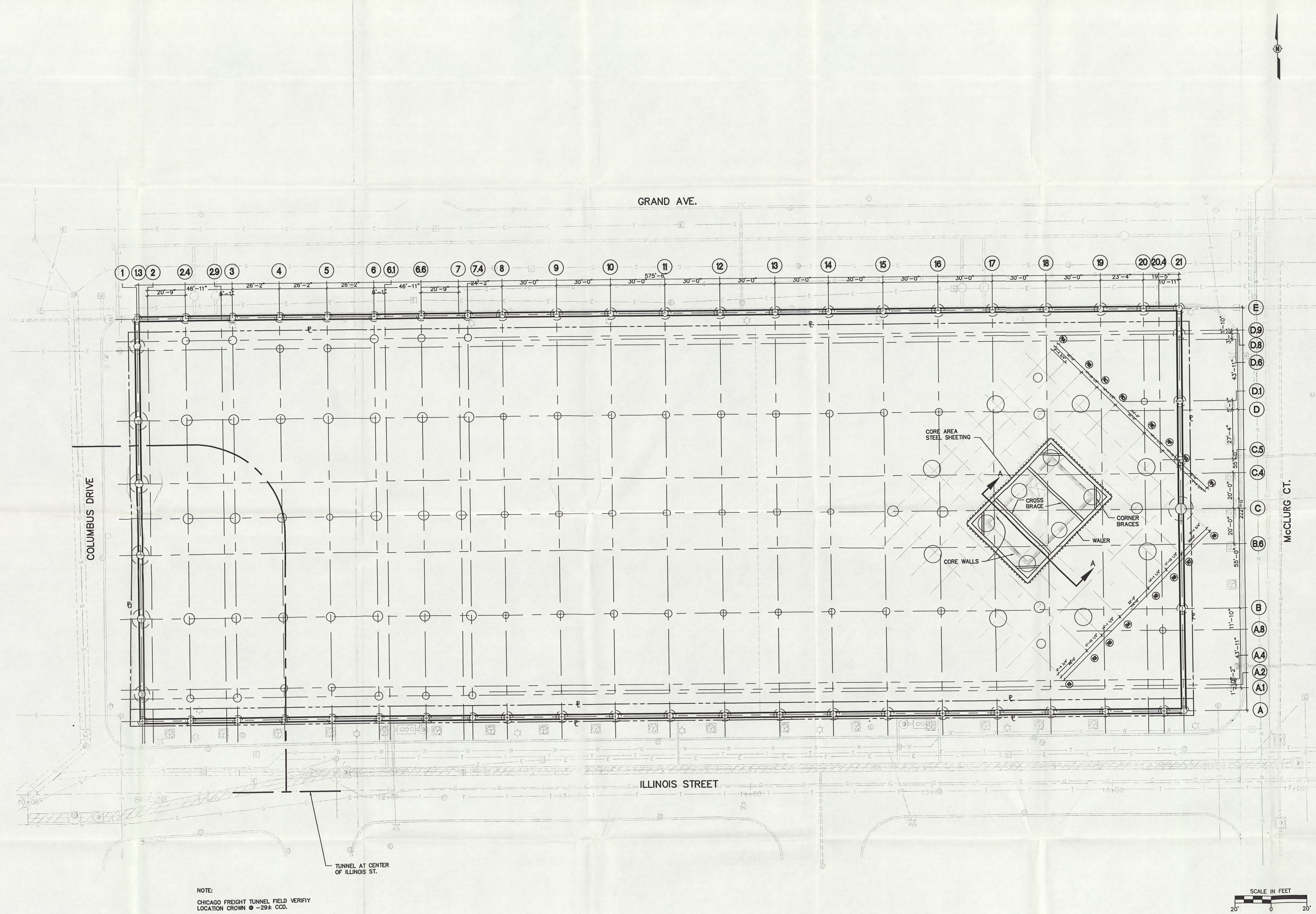
Final site excavation will proceed following the completion of the caisson installation at one end of the site. Excavation and screening will proceed as described in the initial site excavation.

Within the Lake Lindsay excavation, removal of the gravel backfill will proceed without screening. Upon exposure of the walls and floor of the excavation, the boreholes previously drilled which exhibited contamination will be located to $\pm$ 0.5 meter horizontally. Excavation will proceed at those locations to remove any uncontaminated overburden.

Upon excavation to the apparent depth of the base of contamination, the excavation will be surveyed in accordance with SOP-223. Soil samples will be collected at the base and along the walls of the excavation for confirmation by Quanterra.

Tower Core Excavation

The core of the east tower will be excavated to a depth of 56 ft. while the caisson installation proceeds on the remainder of the site. The excavation will be completed using backhoes and hydraulic excavators. Because of the depths involved, excavated soils will be handled according to procedures used for clean soils. Intermittent gamma screening will be conducted to confirm this analysis. Representative samples will then be sent to Quanterra for verification.



CAISSON AN[D] SLURRY WALL PLAN

RIVEREAST CENTER
MIXED USE DEVELOPMENT
300 EAST ILLINOIS STREET
CHICAGO, ILLINOIS

RIVER EAST CENTER

CASE FOUNDATION COMPANY
A KELLER COMPANY
Caissons • Piling • Slurry Wall/Trenches
P.O. Box 40 1325 West Lake St. Roselle,IL 60172 630-529-2911

DRAWN BY	GRS	DATE	4-13-98
CHECKED BY	EJ	DATE	4-13-98
APPROVED BY	EJ	DATE	4-13-98

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REVISION NO.	DESCRIPTION	DATE	BY
2	GENERAL REVISION	5/22/98	EJ
1	B.O.U. ISSUE	5/05/98	EJ

STS PROJECT NUMBER 29746
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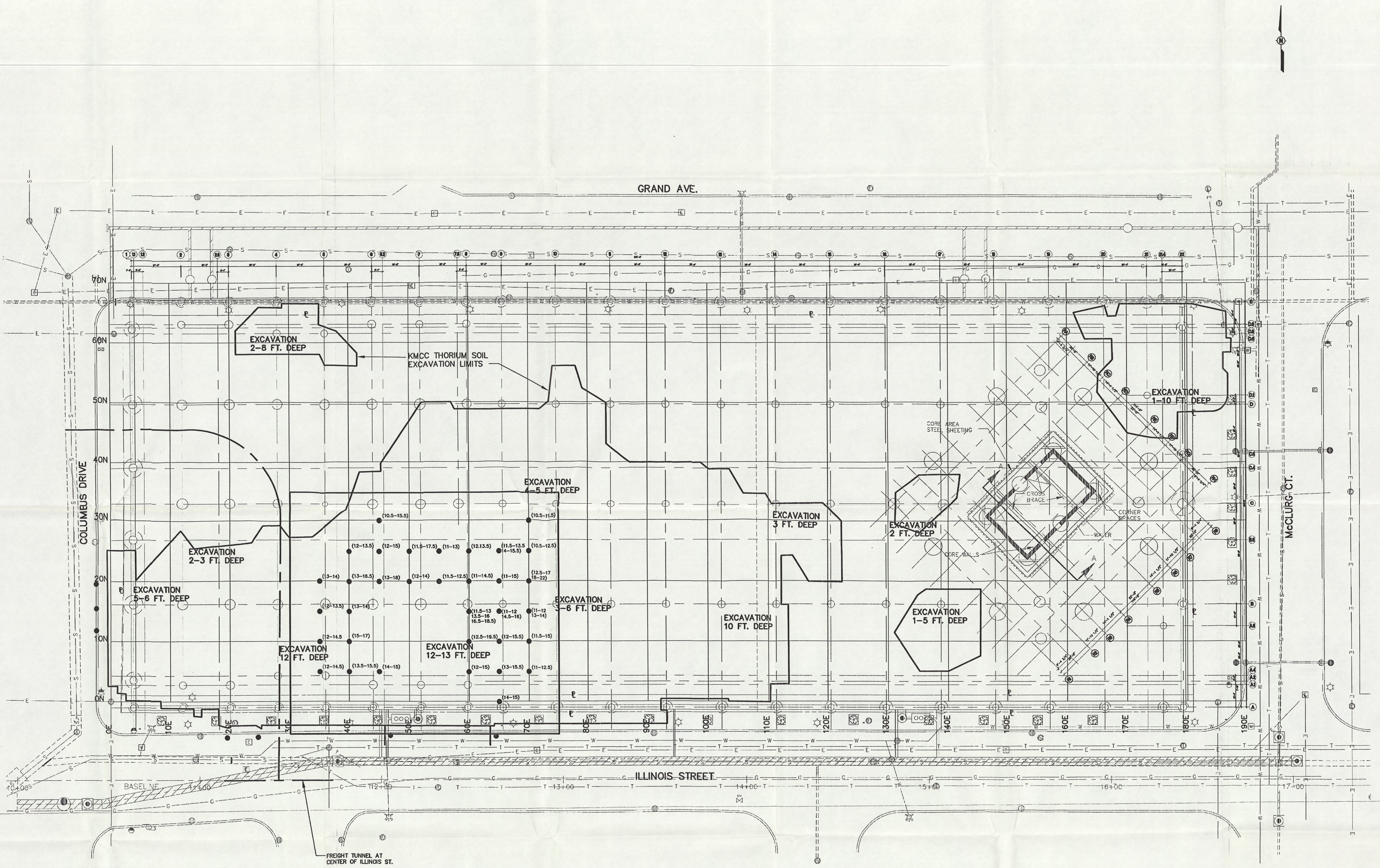
SCALE AS SHOWN
FIGURE 3



NOTE:

CHICAGO FREIGHT TUNNEL FIELD VERIFIY LOCATION CROWN @ -29± CCD.

LEGEND:

THORIUM SOIL EXCAVATION LIMITS

● THORIUM EXCEEDING 7.2 pCi/gm

(16.4–23.9) DEPTH OF CONTAMINATED SOIL

1–5 APPROXIMATE DEPTH OF EXCAVATION

DRAWN BY	GRS	DATE	4-13-98
CHECKED BY	RGB	DATE	4-13-98
APPROVED BY	WHW	DATE	4-13-98

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REVISION NO.	DESCRIPTION	DATE	BY
1	FOR CLIENT REVIEW	6/24/98	WHW

THORIUM CONTAMINATION

RIVER EAST CENTER
MIXED USE DEVELOPMENT
300 EAST ILLINOIS STREET
CHICAGO, ILLINOIS

STS Consultants Ltd.
Consulting Engineers

STS PROJECT NUMBER 24418-RR

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SCALE AS SHOWN

FIGURE 2

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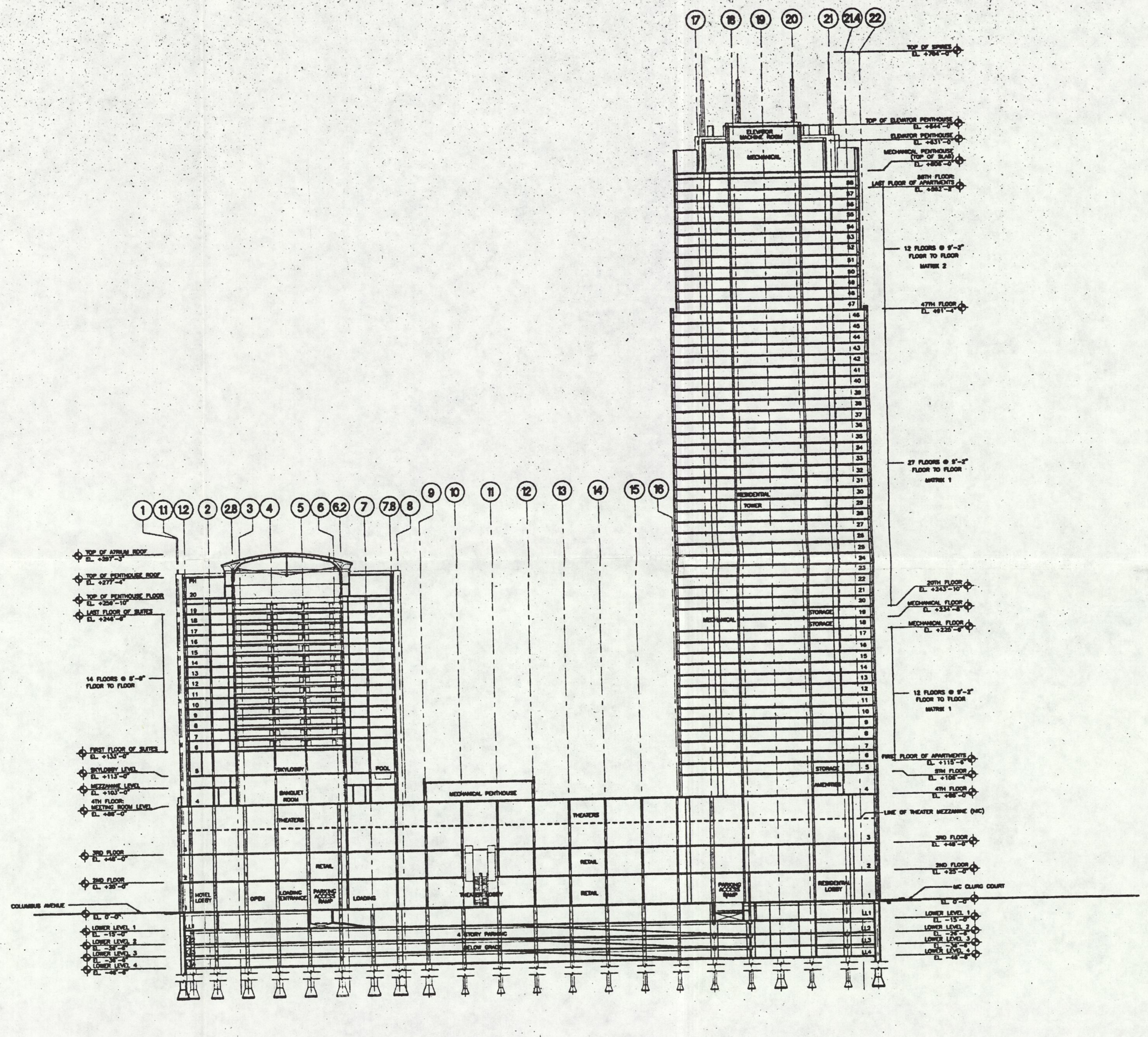

J10 EAST - WEST SECTION

RIVER EAST CENTER

RIVER EAST CENTER
MIXED USE DEVELOPMENT
300 EAST ILLINOIS STREET
CHICAGO, ILLINOIS

RIVER EAST, L.L.C.
DEVELOPER

DE STEFANO PARTNERS

Chris P. Stefanos + Associates
STRUCTURAL ENGINEERS

McClier Corporation
CIVIL ENGINEERS

WMA Consulting Engineers, Ltd.
MEP ENGINEERS

BUILDING SECTIONS EAST - WEST

FIGURE 1